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SCHIFF HARDIN & WAITE
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Chicago, IL 60606

EXAMINER

PIZIALI, JEFFREY J

ART UNIT	PAPER NUMBER
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2629

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03/23/2010

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/725,299	Applicant(s) BECK ET AL.	
	Examiner Jeff Piziali	Art Unit 2629	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 28 December 2009.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 2 and 10-14 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 2 and 10-14 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 01 December 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

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DETAILED ACTION

Priority

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. *Claims 2 and 10-14* are rejected under 35 U.S.C. 103(a) as being unpatentable over *Nokita (US 6,795,528 B2)* in view of *Trueblood (US 5,675,755 A)*, *Lemelson et al (US 6,847,336 B1)*, *Martinez (US 5,999,177 A)*, *Mitchell et al (US 6,983,331 B1)* and *Banks et al (US 6,674,449 B1)*.

Please note that claim order has been altered to reflect claim dependencies.

Regarding claim 10, *Nokita* discloses an operating device [*Fig. 1*] for a medical diagnostic imaging unit [*Fig. 1; x-ray sensor 140 used in diagnosis in medical practice*] (see *Column 3, Line 50 - Column 4, Line 53*), said operating device comprising:

a display screen [*Fig. 1, image display unit 200; Figs. 8ABC, LCD touch panel 810*];

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a control unit [*Fig. 1; imaging controller 180, image processor 190*] configured to operate said display screen to display on said display screen only a display area [*Figs. 8ABC; message display area 845, object information display area 830, parameter display area 835, image display area 825*] and

an operating area [*Figs. 8AB; touch panel depressible imaging method object display area 840*], that do not overlap each other, and

a mode selection field [*Figs. 8AB, modification button 850*] and

also being configured to enter, in a current-value entering session, at least one examination value [*Figs. 8AB; 835 -- e.g., imaging method parameters, standard imaging conditions, imaging region, etc.*] for implementing an examination by said medical diagnostic imaging unit;

said control unit being configured to operate said display screen, in said current-value entering session, in a programmed mode [*Figs. 8AB*] in which, in said operating area of the display screen, only a selection key field [*Figs. 8AB; touch panel depressible imaging method object display area buttons 840*] is displayed,

said selection key field being activatable to select at least one preset value [*Figs. 8AB; imaging method parameters 835 -- e.g., Front Cervical Vertebrae; Standing Position Sensor; Tube Voltage = 72kV; Tube Current = 170mA; Exposure Time = 50msec; Focal Length = 120cm, ImgProcess*] that is preset prior to said current value entering session,

said at least one preset value being selected from the group consisting of preset operating values of said medical diagnostic imaging unit and preset parameter values [*Figs. 8AB; imaging*

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method parameters 835 -- e.g., tube voltage, tube current, exposure time, focal length, image process] of said medical diagnostic imaging unit;

said control unit being also configured to operate said display screen, in said current-value entering session, in a manual mode [*Fig. 8C*] in which, in said operating area of said display screen, ~~only~~ a setting key field [*Fig. 8C; pop-up window comprising selectable up, down, OK, and cancel buttons*] is displayed,

said setting key field being activatable to selectively set at least one settable value [*Fig. 8C; Tube Voltage = 72kV; Tube Current = 170mA; Exposure Time = 18msec; Focal Length = 50cm*] selected from the group consisting of settable operating values of said medical diagnostic imaging unit and settable parameters of said medical diagnostic imaging unit;

said control unit being configured to display, in said display area in said current-value entering session, display elements [*Figs. 8ABC; 830, 825, 835 -- e.g., Examinee Name, ID: 1234577890; Front Cervical Vertebrae; Standing Position Sensor; Tube Voltage = 72kV; Tube Current = 170mA; Exposure Time = 50msec; Focal Length = 120cm*] respectively representing said at least one preset value and said at least one settable value;

said control unit being configured to display at said display screen, in said current-value entering session, said mode selection field, said mode selection field being activatable to select, as a selected mode, only one of either, said manual mode or said programmed mode;

said control unit being configured, in said current-value entering session, to initially maintain all of said display area ~~unchanged and visually unobstructed~~ with said at least one preset value or said at least one settable value displayed ~~only~~ once and ~~only~~ in said display area, when switching between said manual mode and said programmed mode by activation of said

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mode selection field, until said selection key field or said setting key field in the selected mode is activated after said switching; and

said control unit being configured to display, in said current-value entering session, at said display screen, a trigger key [Figs. 8AB, 840] that, when activated, emits a current content of said display area, as said at least one examination value, as an output available to said medical diagnostic imaging unit (*see the entire document, including Column 10, Line 3 - Column 11, Line 9*).

Nokita's setting key field [Fig. 8C; *parameter adjustment pop-up window*] differs from the instant invention insofar as the pop-up window does not completely overlap the operating area [Fig. 8A; 840], and it overlaps some of the display area [Fig. 8A; 830, 835, 825].

Additionally, *Nokita's* pop-up window displays the same parameter values [*voltage, current, time, and focal length*] as were displayed in the display area, prior to the window popping-up and covering them.

However, the examiner is of the respectful opinion that it would have been an obvious design choice of one having ordinary skill in the art at the time of invention to move/resize *Nokita's* pop-up window so that it would overlap the entire operating area [Fig. 8A; 840], but not overlap any of the display area [Fig. 8A; 830, 835, 825], so as to provide the user with a clear view of all of the pertinent information on the entire left-half of the screen, while simultaneously preventing the user from inadvertently pressing any of the operating area buttons [Fig. 8A; 840].

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Moreover, such a repositioning of the pop-up window would reveal all of the parameter values [*voltage, current, time, and focal length*] in the display area, thereby eliminating any need for the pop-up window to display them a second time.

It would have been an obvious design choice of one having ordinary skill in the art at the time of invention to remove duplicate data from being displayed, so as to save screen real-estate, lower graphical processing demands, and present a less cluttered display image for the user.

It would have been obvious to one of ordinary skill in the art at the time of invention, because a person of ordinary skill has good reason to pursue the known options within his or her technical grasp (*i.e., resizing a window, and deleting duplicate text*). If this leads to the anticipated success, it is likely the product is not of innovation but of ordinary skill and common sense.

Trueblood discloses a method for automatically preventing a pair of windows [*Figs. 6, 7: 204, 206*] from overlapping each other (*see the entire document, including Column 8, Lines 15-48*).

Trueblood and **Nokita** are analogous art, because they are from the shared inventive field of graphical user interfaces comprising pop-up windows.

Therefore, it would have been obvious to one having ordinary skill in the art to use **Trueblood's** window overlap prevention techniques to keep **Nokita's** pop-up window from overlapping the display area [*Fig. 8A; 830, 835, 825*], so as allow more useful information to be simultaneously displayed.

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Moreover, **Lemelson** discloses a graphical user interface [*Fig. 7C*] for displaying x-ray images [*Fig. 7C: 94, 96*] alongside operating device parameter values [*Fig. 7C: 98*] (*see Column 17, Line 55 - Column 18, Line 12*).

Lemelson also discloses the GUI technique of resizing (*as well as tiling, cascading, selecting, hiding, rearranging, and adjusting the transparency of*) windows containing medical x-ray data was well known and commonly understood by those skilled in the art at the time of invention (*referring to such techniques as "well known programming techniques from the Macintosh or Windows 95 operating systems"*).

Lemelson and **Nokita** are analogous art, because they are from the shared inventive field of operating devices and graphical user interfaces for medical diagnostic imaging units.

Therefore, it would have been obvious to one having ordinary skill in the art to use **Lemelson's** resizing window technique to move and/or resize **Nokita's** parameter modification window [*overlaid window in Fig. 8C*] such that **Nokita's** window would only be big enough to overlay/cover the touch panel depressible imaging method object display area buttons [*Figs. 8AB; 840*], leaving display area [*Figs. 8ABC; 825, 830, 835, 875*] completely visible -- so as to provide the user with greater flexibility in controlling how much data can be displayed at any given time; and so as to emphasize, stress, and/or bring attention to the at least one preset value for the user's benefit.

Martinez discloses a method for hiding display information that "*serves no useful purpose*" for the user (*see the entire document, including Figs. 7-12; Column 3, Line 20 - Column 4, Line 32*).

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Martinez and **Nokita** are analogous art, because they are from the shared inventive field of graphical user interfaces comprising pop-up windows.

Therefore, it would have been obvious to one having ordinary skill in the art to apply **Martinez's** useless data hiding techniques to prevent **Nokita's** pop-up window from displaying the parameter values [*voltage, current, time, and focal length*] a second time on the display screen, so as to hide information that is not of interest to the user (*because the same data is already displayed elsewhere on the screen*).

Moreover, **Mitchell** discloses a method for prioritizing sets or areas of display content [*e.g., Fig. 2a: 62, 70*] and suppressing the display of some of that content when the available display space is determined to be too small (*see the entire document, including Figs. 2-5; Column 11, Line 25 - Column 12, Line 60*).

Mitchell and **Nokita** are analogous art, because they are from the shared inventive field of graphical user interfaces comprising windows.

Therefore, it would have been obvious to one having ordinary skill in the art to use **Mitchell's** window content prioritization and suppression techniques to prevent **Nokita's** pop-up window from displaying the parameter values [*voltage, current, time, and focal length*] a second time on the display screen, so as to clear the display of less important information (*e.g., data already displayed elsewhere on the screen*) when window space is cramped.

Should it be shown that **Nokita** teaches a trigger key, as claimed, with insufficient specificity:

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Banks discloses a touch panel trigger key [e.g., Fig. 5: 284, 286, 288, 290] causing a medical imager to take a picture of a patient (*see the entire document, including Column 12, Line 35 - Column 14, Line 35*).

Banks and **Nokita** are analogous art, because they are from the shared inventive field of operating devices and graphical user interfaces for medical diagnostic imaging units.

Therefore, it would have been obvious to one having ordinary skill in the art to use **Banks'** touch panel trigger key to provide the functionality of **Nokita's** x-ray exposure button [Fig. 1: 210], so as to provide a simple and convenient way for the user to take pictures without having to rely on two separate interface devices.

Regarding claim 2, **Nokita** discloses the operating device is designed as a touch-sensitive display screen [Figs. 8ABC, LCD touch panel 810] (*see Column 10, Line 3 - Column 11, Line 9*).

Regarding claim 11, **Nokita** discloses said control unit is configured to display said display elements as text elements [Figs. 8ABC; tube voltage, tube current, exposure time, focal length, examinee name, ID number, front cervical vertebrae, etc.] (*see Column 10, Line 3 - Column 11, Line 9*).

Regarding claim 12, **Nokita** discloses said control unit is configured to display said display elements as graphics elements [Figs. 8ABC; tube voltage, tube current, exposure time, focal length, examinee name, ID number, front cervical vertebrae, vertebrae graphics, etc.] (*see Column 10, Line 3 - Column 11, Line 9*).

Regarding claim 13, **Banks** discloses displaying said trigger key at said display screen in each of two modes [*e.g., Figs. 5 & 6*] (*see the entire document, including Column 12, Line 35 - Column 14, Line 35*).

Moreover, it would have been obvious to again apply **Trueblood's** window overlap prevention techniques to **Banks'** trigger key, or simply to move into the upper right corner of **Nokita's** screen [*Fig. 8A*], so as to provide the user with the unrestricted ability to take pictures at any time, regardless of the selected mode.

Regarding claim 14, **Nokita** discloses said medical diagnostic imaging unit is an x-ray examination unit, and

wherein said control unit is configured to display, in said selection key field in said programmed mode, a plurality of selection keys [*Figs. 8AB; touch panel depressible imaging method object display area buttons 840*] each associated with one anatomical x-ray examination in a plurality of anatomical x-ray examinations [*Figs. 8AB; FRONT, CROSS-SECTION, SIDE, LEFT BACK AT A TILT ANGLE*],

each selection key allowing a user to select said at least one preset value for the anatomical x-ray examination associated with that selection key, and

to display, in said setting key field in said manual mode, a plurality of different setting keys [*Fig. 8C; pop-up window comprising selectable up, down, OK, and cancel buttons*] that respectively allow manual setting of said at least one settable value for a component of said x-ray examination unit (*see Column 10, Line 3 - Column 11, Line 9*).

Response to Arguments

4. Applicant's arguments filed on *28 December 2009* have been fully considered but they are not persuasive.

Applicant's arguments with respect to *claims 2 and 10-14* have been considered but are moot in view of the new ground(s) of rejection.

By such reasoning, rejection of the claims is deemed necessary, proper, and thereby maintained at this time.

Conclusion

5. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event,

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however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jeff Piziali whose telephone number is (571) 272-7678. The examiner can normally be reached on Monday - Friday (6:30AM - 3PM).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chanh Nguyen can be reached on (571) 272-7772. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Jeff Piziali/
Primary Examiner, Art Unit 2629
17 March 2010